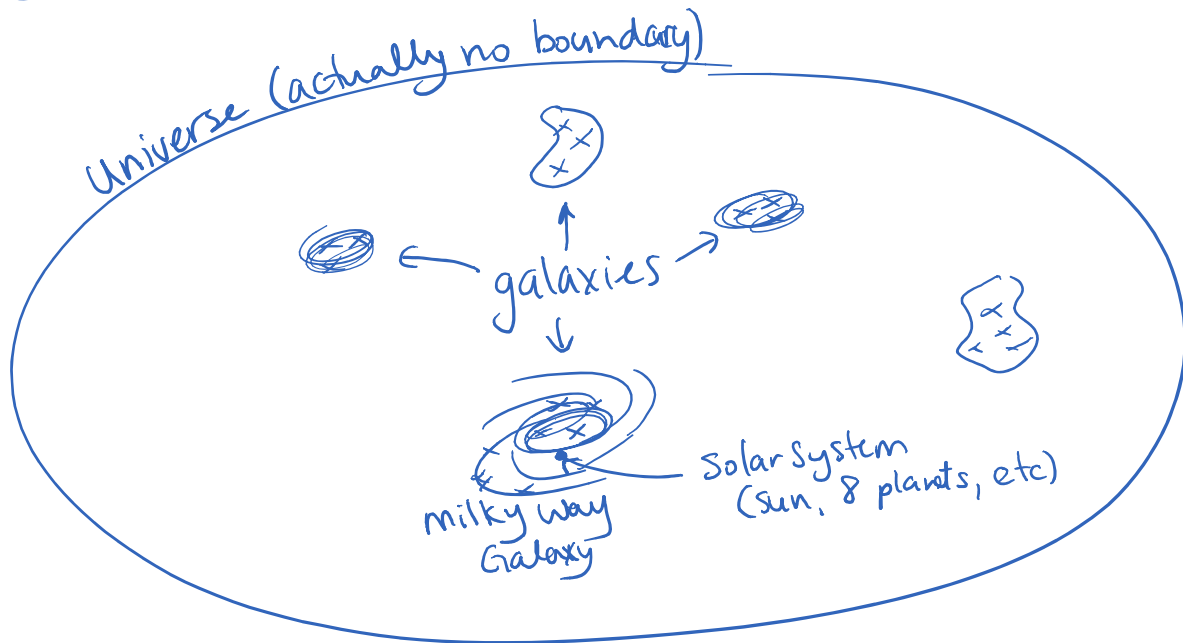


## Diagram of the Universe



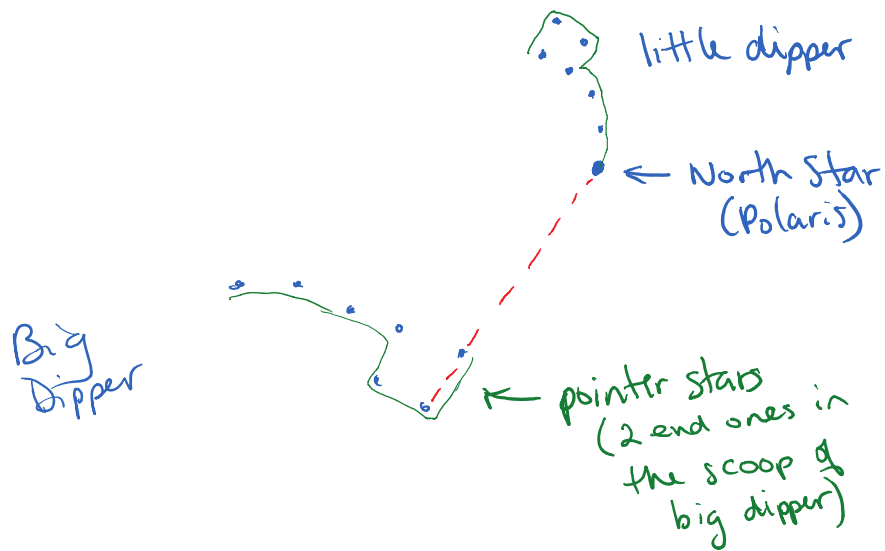
Billions of galaxies with billions of stars in each and many/most stars have planets in orbit.

1. Galaxy - a group of billions of stars that are bound together by gravity
2. Constellations - a group of a few points of light (usually stars) that appear to form a picture.

### 4 main constellations

- bears {
- a) Ursa Minor (constellation)  
→ little dipper (asterism - a small group of stars, part of constellation)
  - b) Ursa Major (constellation)  
→ big dipper (asterism)

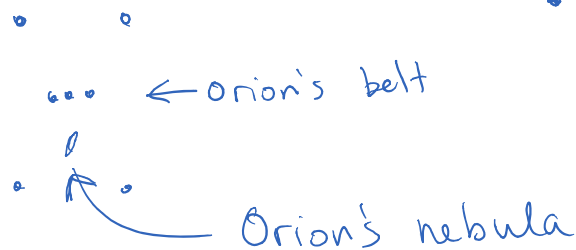
→ big dipper (asterism)



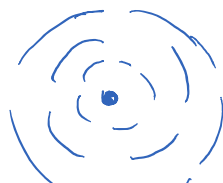
c) Cassiopeia



d) Orion



- constellations are used by sailors to navigate
- ⊕ (Earth) rotates from W to E, so sky appears to move E to W (ie sun, moon, stars rise in the East and set in the west)
- Circumpolar Star Trails - N star stays at the centre since our axis of rotation points at it



— We see different constellations at different times of year due to  $\oplus$ 's position around the sun

